4th generation technologies as language supporting tools used by English-language teachers. Applications review

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ABSTRACT

This work aims to present the usefulness of mobile applications in the language education process. The subject of research has been applications recommended by the British Council and online dictionaries, available in the form of a mobile app. The analysed solutions are free applications such as the Oxford Dictionary or Johny Grammar Word Challenge with the LearnEnglish series. Developing language skills and competencies in English lessons in Polish schools can be done using a variety of applications, both paid and free. Each app offers various forms of foreign language improvement, and the vast majority provide English-Polish translations, including explanations of how to define a specific word. The work was divided into three principal sections: reading and writing applications, online dictionaries and applications developing the ability to use English using the method of learning through play. The assumption of the analysis is the selection of apps available for mobile devices that support the process of teaching English during classes. The analysed solutions are tested both concerning functionality and usability as well as regarding the attractiveness of use. The primary interest in this work is Oxford and Johny Grammar, one of the applications recommended by the British Council to support the education process, which is at the same time the foundation of sustainable development, maintained as an integral part.

Keywords: 4th generation technologies, tools supporting English teaching, applications for English teaching, English as a second or foreign language

(Received 09 January 2019; Accepted 26 January 2019; Date of Publication 27 January 2019)
1. INTRODUCTION: 4TH GENERATION TECHNOLOGY THAT OFFERS TO LEARN THROUGH PLAY

According to the recommendations of the UNESCO (2013), mobile technologies should be used in a way that allows learning anywhere and anytime. Expanding the reach and quality of education can be possible, e.g. by the practical application of mobile learning technologies like an online dictionary, e-learning platforms or mobile application. Johnson et al. (2014) noticed that the use of personalised solutions stems from the diversity of technologies that students have today.

Each student has his smartphone, tablet, and computer - a combination of solutions offered by the school with the possibilities of individual continuation of the education process has become a necessity. The choice of electronic tools supporting the learning and teaching process should be based on the recommendations of institutions with authority (e.g. British Council, Oxford or Collins). According to Oxford Dictionaries, “Oxford Dictionaries puts language information at your fingertips wherever you are - on your PC, a mobile device or even when using a search engine or social media app” (Oxford 2018).

Making available the highest quality content for educational purposes guarantees the acquisition of knowledge from the most reliable sources. Nowadays the quality of network resources depends on the legal or business entity responsible for the creation of a given educational solution. Institutional resources, such as the dictionaries and applications of professional publishers (Oxford, Collins, British Council), have another value then apps created by private users. Deliverance to the student with verified and reliable information on useful solutions to improve self-learning using information technology is the basis for the care of the quality of remote education. Applications recommended by well-known and professional institutions enhance the quality of learning and teaching around the world.

In the 21st century, almost every young person has 4th generation technology such as a smartphone or tablet with internet access. The connection between a user and the global network is a base of e-learning and self-development. Mobile applications are divided into paid and free. Free software is one of the most frequently used by the user.

The choice of solutions dedicated to learning English is divided into the following categories:

- online dictionaries;
- learning applications through play.

A more detailed breakdown includes categories such as improving listening comprehension, reading and writing, and solutions combining all these functions. A separate class that forms part of the multifaceted development is social media, which can be a stimulating environment for student development in well-designed spaces.

The subject of this work is Oxford and WordNet dictionaries as well as applications recommended by the British Council.

2. ONLINE DICTIONARIES - OXFORD, COLLINS AND OTHERS

An overview of online dictionaries has been carried out by Bastos H. P. P. and Machado G. P. F. (2016). The authors drew attention to the fact that online dictionaries allow searching for content not only alphabetically (as is the case in paper formulas). Electronic applications of well-known dictionaries will enable to search information by class, function, meaning, idioms, collocations, and examples in sentences (Bastos and Machando, 2016). Indicated functions are available, among others, in the Oxford and Collins dictionary.

The Oxford Dictionary is one of the major dictionaries that support learning English - British. The institutional dictionary created by professionals guarantees reliable and verifiable data (Fuertes-Olivera, 2009). In contrast to “collective” solutions, institutional dictionaries that take the form of mobile applications provide access to the highest quality resources.

Oxford Dictionary is a relatively young tool that was created as a lexicographic portal oxforddictionaries.com. This dictionary was based on the third edition of the Oxford Dictionary of English and the American equivalent - New Oxford American Dictionary (Jucker, 1994).

The mobile application of the British dictionary is not available in the free version with the Polish translation. It is an English dictionary containing the definition of specific words in English. Application Supplement - Oxford Translator in the free version does not provide the Polish language.

Oxford as a professional English dictionary of the British language is used primarily to expand the knowledge base and enrich vocabulary. For enriching the vocabulary of the user is responsible, among others the “word of the day” algorithm, generating random words of the day. The word of the day tool motivates the student to learn vocabulary independently, which extends the language resource and enriches the level of knowledge and language experience.

Oxford is a famous English dictionary offering word definitions in English. The dictionary, allowing access to descriptions, prompts the user to broaden the scope of vocabulary and search for other meanings of words that were considered unintelligible (see Figure 1 and Figure 2).

Figure 1. Oxford dictionary. The sample of a definition.

During English classes, students have the opportunity to learn the vocabulary and discuss the known definitions and unintelligible words. The dictionary, giving the description of the
word of the user, improves, among others the ability of logical thinking, reading comprehension or contextual thinking. From the meanings learned, the student adjusts the sense of the word used to the context of his speech (Schryver, 2003).

**Figure 1.** Oxford dictionary. The word of the day with the definition.

The Oxford Dictionary gives both the definition of a word and the correct pronunciation, which on the one hand allows you to improve listening skills with understanding, on the other hand, it will enable you to enrich vocabulary and expand your resource with following phrases and expressions. An additional advantage is the ability to check words back, adjust the font size to a level adapted to individual skills, add a specific phrase or word to your favourites or share in social media, send to another device or make the subject of the blog entry. The scope of the word's availability is dependent on the functionality of the particular smartphone model.

The “word of the day” tool built into an Oxford elephant motivates the student to learn a new word and use it in various everyday situations. The choice of words is based on a random algorithm, the generated words are arbitrary, remaining words that the student should know.

Oxford online gives the student access to the history of the search words, which improves memory and recording messages (Figure 3). The history of recently searched words is a helpful tool both in consolidating and enhancing the acquired content and motivating for further learning by purchasing a new vocabulary resource when working with a dictionary.

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![Oxford Dictionary](image)

**Figure 3.** Oxford dictionary – Functionality of Recent words.

While the student can use the Oxford dictionary as school help, replacing a traditional, printed dictionary, the talk & translate application can be used to support everyday learning practice. It is also a good solution supporting the pronunciation exercise - the student can independently choose the character of the leading voice (male/female) and translate entire sentences on a regular basis thanks to the built-in translation mechanisms.

Oxford in the dictionary version also gives the opportunity to invite friends to use the application server and create a group in which students can exchange results, but the primary purpose of the dictionary is to improve the learning of English by defining words used.

Collins dictionary is an application very similar to the Oxford dictionary - it offers both essential definition services and randomly generated passwords displayed in the form of “word of the day”. A solution similar to those mentioned above is also The American Heritage Dictionary & Roget’s Thesaurus. Both Collins and American Heritage are paid settlements, and their functionality is almost identical to the simplified version of the Oxford or WordNet dictionary.

Learning English with a dictionary in the mobile version for the majority of teenagers can be a good alternative, diversifying the use of only printed textbooks (Xiang, Zhang, Gu, & Cai, 2018; Zhou, Liu, Bhaskar, Yang, & Cai, 2018).
Figure 2. Functionality of an application – possibilities of using other languages.
The interest in modern technologies is one of the elements constructing the student’s reality regardless of age (Leidner and Jarvenpaa, 1995; Winn & Jackson, 1999; Warschauer, 2000, van Lieshout 2001; Merchant, Goetz, Cifuentes, Keeney-Kennicutt, & Davis, 2014).

3. JOHNY GRAMMAR’S WORD CHALLENGE

Johny Grammar's Word Challenge is an application that allows you to teach in the spirit of Montessori in primary and secondary schools. The app is of entertainment character - it was designed as a series of domain quizzes that facilitate the acquisition of information. The app is perfect for both learnings outside of the classroom and during joint activities. The user from the interface level has the opportunity to choose the type of task that will be the subject of the play. The application gives you three options: Grammar, Words and Spelling (Figure 5).

The GRAMMAR section is equipped with an extensive set of components that enable development on the following levels:

- prepostions;
- irregular verbs;
- adjectives & adverbs;
- countable & uncountable;
- infinitive or gerunds;
- more or less;
- expression with colour;
- few and a little;
- adverbial clauses;
- modals;
- linkers;
- conjunctions.

Quizzes on particular topics have specific degrees of difficulty - from the easiest to the most difficult. The number of questions that each student will answer correctly depends on the time needed to explain. The big advantage of quizzes is the fact that they show to the user’s information the place of making a mistake together with the correct answer.

The use of technology in the era of the digital revolution seems necessary for educational purposes (Leidner & Jarvenpaa, 1995 or Warschauer, 2000). Creating a sustainable environment is a process of modernising existing solutions (Wals & Jickling, 2002; Belanger, 2003). Modernisation cannot be carried out without analysing the needs and phenomena on the market. Therefore, if pupils of different ages have full capacity to operate devices such as smartphones, tablets or laptops, their use in the educational process seems necessary. On the one hand, it gives the student some support in the selection of downloaded content and directs the individual to the search for information.

This aspect of awakening curiosity and language improvement through play contributes to building and improving competencies in the field of data management. On the other hand, the control over downloaded applications that allow improving language learning, based on government recommendations or international guidelines, or specialised solutions designed on a local scale, allows the selection of the most effective solutions that support education on a multifaceted basis.
Figure 3. Johny Grammar’s Word Challenge.
Johny Grammar is an application that helps you consolidate knowledge, improve your understanding and manage knowledge. It is also a fitness test - the participant of the quiz has 60 seconds to indicate the correct answer, after which the next question appears. The indication of the error in the answers provided, along with the correct answer that should have been given, is also significant (Figure 6).

![Correction of correctness](image)

**Figure 4.** Johny Grammar. Correction of correctness.

An extensive application for learning English, having the ability to train the language through play is a multi-level solution that streamlines the education process while improving the level of attractiveness of the classes.

The significant advantage of the application is diversity in choosing ways to work with the language. At the grammar level, the student has the opportunity to solve some quizzes that improve various areas of knowledge (prepositions, irregular verbs, etc.). At the level of building vocabulary (words), the student has the opportunity to choose a category for the subject of the speech and the purpose of the conversation. Tasks have been grouped according to usability and application in specific situations (Figure 7).

Quizzes on the lettering of individual words are also an excellent exercise (Figure 8). The student has the opportunity to visually familiarise himself with the different written versions of the word and choose the correct form of writing the word. For each answer is 10 seconds, for the whole quiz minute - as in the other cases, so during the spelling, the application gives the wrong answer and next to it correct, which allows you to improve the use of English.
Education through play, which is offered by applications such as Johny Grammar, is a good solution for most educational processes. It helps both to improve language skills and to consolidate knowledge and to manage levels of understanding of specific dates. Extensive opportunities to practice the language at different levels make the application used in the English language classes contribute to the increase in students' interest in both the teaching process and the way of using modern technologies.

The fourth-generation technology, which is an emerging and developing phenomenon on the market of digital services, allows you to automate the process of information acquisition.

**Figure 5.** Categories of quizzes in the field “words”.
Figure 6. The spelling category in the Johny Grammar quiz.
The algorithms on which the applications are designed to give access to the necessary information resource, the possession of which becomes the key to the effectiveness of learning and teaching. Johny, used during classes at the post-primary school is an excellent way to record and repeat the material. The friendly atmosphere created by the possibility of cooperating with technology during language classes makes the student acquire knowledge much faster, and the degree of consolidation is correlated with positive emotions, which additionally affects the concentration based on positive stimulation.

Language applications such as Johny Grammar have a positive impact on building language competencies and strengthening knowledge. Learning through play is one of the simplest and oldest ways of transferring knowledge. Its effectiveness does not depend on the student's age - efficiency is determined by the tools used. For teenagers who are in secondary school, it is fun to use technology 4 of this generation. The selection of tools (both technological and digital) must be adapted to the age and individual needs and preferences and interests of the student. The use of an application based on the entertainment form of knowledge transfer allows increasing the level of teaching effectiveness by arousing interest and willingness to cooperate and participate in group projects. The basis for creating a friendly educational environment is cooperation between the teacher and students. Applications such as Johny Grammar allow you to create a creative development space in which technology finds application suitable for creation.

4. CONCLUSIONS

NAEYC - The National Association for the Education of Young Children - indicates that technology is an essential aspect of the everyday functioning of most people in America. Technology is treated as one of the tools enabling access to information and problem solving (Morrisson, 2006). Already Gros (2007) and Keengwe, Onchwari, & Wachira (2008) note the potential benefits of proper use of computers as tools supporting the education process. The purpose of English language learning applications, such as online dictionaries or tools recommended by the British government, has a positive effect on the acquisition of knowledge by students, regardless of their age. Gros (2014) analysed the impact of a computer on the educational process in the context of learning through play. The development of technology and the universality of access to the internet via devices such as smartphones allows the use of conventional equipment for educational purposes.

The diversity of applications available for smartphones gives the teacher the opportunity to influence the quality of the tools used by students. Thanks to this, the teaching and learning process takes place in parallel, and the student has the opportunity to acquire material also outside the classroom. The search history of the last words, available in dictionaries, or the possibility of repeating the quiz and improving the ability to use specific phrases are just some of many useful tools that support the teacher's work during the class. The same tools, used systematically, are the source of information and the basis for building language interactions (the possibility of establishing groups, creating group games, etc.). Achieving the highest level, granted using unique decorations by the application raises the self-confidence of the student and makes him much more willing to use a foreign language.

Technology has changed not only learning opportunities but also teaching (Hughes, 2005; Keengwe, Onchwari, & Wachira, 2008; or Gros, 2014). One of the technologically proposed
solutions (Larsen – Freeman & Anderson, 2011) gives the opportunity to learn a foreign language in two critical ways, which include: providing teaching resources (podcasts, online dictionaries, weblogs, podcasts, online tables) and increasing educational experiences by providing the student with the opportunity to develop language skills at an individual pace. The potential of the technology is often used to build interest in learning foreign languages. Online elephants, available on mobile devices such as smartphones, allow to improve language skills as well as learning new words. Most dictionaries, such as the Oxford Dictionary, offer both translations (English-English), allowing you to build a student's vocabulary, as well as developing the ability to use English by completing the vocabulary with suggested words as words of the day (Figure 1). In addition, the application user can also check the date of the day’s words and learn all the outstanding words that have different periods. Such opportunities allow for the improvement and development of the learner's language skills, and for the teacher they are an essential help, supporting the education process.

References


